REMARKS

Claims 1-9 are currently pending in the application, claims 11-20 having been withdrawn in response to a restriction requirement. By this amendment, claims 1-9 are amended. The foregoing separate sheets marked as "Listing of Claims" shows all the claims in the application, with an indication of the current status of each.

In the specification, the paragraphs beginning at page 5, line 19; page 6, line 14; page 7, line 11; page 8, line 2; page 8, line 27; page 9, line 9; page 9, line 25; page 10, line 24; page 11, line 4; page 15, line 14; page 17, line 12; page 18, line 1; and page 18, line 24, have been amended to correct errors in grammar and syntax. No new matter has been added.

The applicant has reviewed the related cases and the information currently in the application is up-to-date.

The Examiner has required the applicant to cancel non-elected claims 10-20, which will be done when a divisional application is filed so as to maintain continuity of the claimed subject matter, and until that is done applicant maintains the traverse of the restriction requirement as articulated in the applicant's response submitted on July 9, 2007, and withdraws the non-elected claims from consideration. It is believed that this course of action is responsive to the Examiner's requirement.

The Examiner has rejected claims 1-9 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2004025495 to Schmidt et al. ("Schmidt").

The Schmidt reference describes a system for managing integration of a heterogeneous application landscape defined by one or more business processes. The system provides an integration server which is connected between applications in the landscape and which includes a business process engine configured "to execute one or more business processes that define message-based interactions between the two or more applications," which in turn includes a runtime engine for executing messaging services on the message-based interactions between the applications (Abstract).

The present invention provides a novel method of integrating additional applications to an existing environment by using an activity chain ontology. The activity chain ontology allows high-level business process integration knowledge to be separated from lower operational level hard coding (page 8, lines 9-10). A business collaboration scenario can be composed from primatives of a collaborative exchange protocol (described in the related application S/N 10/665,699) to automate a sequence of complex interactions between applications in the environment based on annotated messages (page 3, line 19, to page 4, line 8). The activity chain ontology structure allows messages to and from an additional application to be handled "on the fly" as needed, so that more detailed messages do not need to be handled until the further details are actually required by a later message. The integration activity needed for a particular message can be specified in that message as an annotation (page 5, lines 23-24). In contrast to the prior art (e.g. a RosettaNet or EDI message), the integration action does not need to be pre-defined in a schema to be sent (page 6, lines 18-21).

The implementation mechanism for the invention is built around an action manager (item 12 in Fig. 1), which is isolated from the applications in the environment by an application layer. A new integration activity of an application requires an implementation in the adaptation layer, using the pre-defined adaptation layer interface (page 6, lines 3-8). This can be "plugged-in" to the action manager, which itself does not have to be modified and which can then invoke the new application without having to modify the application (page 6, lines 6-13).

Both Schmidt and the present invention are concerned with collaboration among different applications in a common environment, where the prior art provides dedicated adapters whose functionality is hardwired and therefore inflexible. Both Schmidt and the present invention use message-based collaboration. Schmidt defines the problem as one of "mapping different business semantics" (¶0005), and captures "design time collaboration descriptions" and "configuration-specific collaboration

descriptions ... at runtime" (¶0030). From this "shared business semantics" the integration server 206 executes message-based collaboration at runtime. By contrast, the present invention does not attempt to construct such a "shared business semantics" but instead adapts "new integration activity" on the fly by implementation of an adaptation layer specific to the application that is receiving the message (page 6, lines 6-8). A concern of the present invention – which is not evident in Schmidt – is to be able to structure the communication appropriately in accordance with the developmental stages of the collaboration. See, for example, the "wave 1, wave 2 and wave 3" levels of specificity in the progression from product design to detailed implementation as shown in Fig. 2. The mechanism devised by the present invention to provide the necessary flexibility from instance to instance of "the same type of collaborative message" (page 6, line 22) is to use optional annotations for specification by the sender of the integration (page 6, line 26). Instead of operating from a "shared business semantics" via a common integration server, the present invention provides a flexible collaboration vehicle (i.e. the optional annotation) between a particular sender and receiver that, in practical effect, recognizes that "it is not possible to pre-define all actions ahead of time" (page 7, lines 5-6). This means that particular instances of a message between a sender and a receiver via an adaptation layer can "trigger a new or different integration activity at any on need basis" (page 7, line 8).

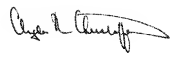
Claim 1 has been amended to clarify the foregoing aspects of the invention, which are not anticipated by Schmidt.

In view of the foregoing, it is requested that the application be reconsidered, that claims 1-9 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at 703-787-9400 (fax: 703-787-7557; email: clyde@wcc-ip.com) to discuss any other changes deemed necessary in a telephonic or personal interview.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account 50-0510 (IBM-Yorktown).

Sincerely,



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